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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,674	06/18/2001	Thomas J. Nosella	CISCP185	1033
22434 7590 06/10/2009 Weaver Austin Villeneuve & Sampson LLP P.O. BOX 70250 OAKLAND, CA 94612-0250				
EXAMINER				
HO, DUC CHI				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/883,674

Applicant(s)

NOSELLA ET AL.

Examiner

DUC C. HO

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15, 17-24, 26-31, 32-35, 37-42 is/are rejected.
- 7) ☒ Claim(s) 7, 16, 25, 43-44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 05-27-09

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-6, 8-15, 17-24, 26-31, 32-35, 37-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Wils et al. (US 6,397,260), hereinafter referred to as Wils.

Regarding claim 1, Wils discloses IP multi-homing. In Wils R1 and R2 are gateways for serving a number of hosts H1-H4.

receiving an address resolution protocol (ARP) message from a host addressed to an

address shared by a plurality of gateway devices available for serving the hosts on the network

segment (a router R1-fig.2 received an ARP message from the host H1, the message includes the IP address IPA of the router R1, see col.4, line 55 to col.5, line 16);

in response to the received ARP message, and based on load balancing considerations,

selecting one of the plurality of gateway devices to act as the addressee gateway device for the

host (the router H1 returns an ARP response including MAC address, wherein load

balancing is achieved by configuring different hosts for the router R1 among the routers R1 & R2, see col. 4, lines col. 5-line 57 to col.6-line 20); *and*

replying to the ARP message with a reply message identifying the selected addressee

gateway device (the router H1 returns an ARP response including MAC address corresponding to the IP address IPA, see col. 5, lines 57-60).

Regarding claim 2, the IP addresses for gateway routers associate with layer 3, see col. 3, lines 43-56.

Regarding claim 3, the shared address IP-IPA for routers R1 & R2 is a virtual IP address.

Regarding claim 4, the reply message from the router R1 includes a MAC address of the router, which associates with layer 2 address, see col. 3, lines 42-55.

Regarding claim 5, the layer 2 address, i.e. MAC-MA, fig.2, for the router R1 is a virtual secondary address.

Regarding claim 6, if the router R1 being the master for virtual router A fails, the virtual router A-backup R2 will be replaced, see col.5, lines 16-28.

Regarding claim 8, this claim has similar limitations as claims 1 and 6. Therefore, it is rejected under Wils for the same reasons set forth in the rejection of claim 8.

Regarding claim 9, this claim has similar limitations as claim 2. Therefore, it is rejected under Wils for the same reasons set forth in the rejection of claim 2.

Regarding claim 10, this claim has similar limitations as claim 1. Therefore, it is rejected under Wils for the same reasons set forth in the rejection of claim 1. The router R1 inherently includes a computer-readable medium containing programmed instructions to perform the claimed steps.

Regarding claims 11-15, these claims have similar limitations as claims 2-6, respectively. Therefore, they are rejected under Wils for the same reasons set forth in the rejection of claims 2-6, respectively.

Regarding claims 17-18, these claims have similar limitations as claims 8-9, respectively. Therefore, they are rejected under Wils for the same reasons set forth in the rejection of claims 8-9, respectively.

Regarding claim 19, please see the rejection of claim 1. The virtual router A-master R1 is a master gateway router and virtual router A-backup R2 is a slave gateway router. The master router gateway inherently includes a memory for holding a shared address, which is the "IP-IPA, MAC-MA", shared by the master and the slave gateway router. The master router inherently includes a network interface configured to send and receive network traffic, and a processor for performing the select and reply steps.

Regarding claim 20, the IP addresses for the master and slave gateway routers associate with layer 3, see col. 3, lines 43-56.

Regarding claim 21, the shared address IP-IPA for the master and slave gateway routers R1 & R2 is a virtual IP address.

Regarding claim 22, the reply message from the router R1 includes a MAC address of the router, which associates with layer 2 address, see col. 3, lines 42-55.

Regarding claim 23, the layer 2 address, i.e. MAC-MA, fig.2, for the router R1 is a virtual secondary address.

Regarding claim 24, if the processor of the master gateway router R1 detects its failure, the virtual router A-backup R2 will be reconfigured as a mater, see col.5, lines 16-28.

Regarding claims 26-31, these claims have similar limitations as claims 1-6, respectively. Therefore, they are rejected under Wils for the same reasons set forth in the rejection of claims 1-6, respectively.

Regarding claims 32-33, these claims have similar limitations as claims 8-9, respectively. Therefore, they are rejected under Wils for the same reasons set forth in the rejection of claims 8-9, respectively.

Regarding claim 34, this claim has similar limitations as claim 1. Therefore, it is rejected under Wils for the same reasons set forth in the rejection of claim 1. The router R1 is considered as a first gateway device.

Regarding 35, if a master gateway router among the virtual routers master R1, R2 and the virtual routers slave R1, R2 fails, the backup router will be configured as a master to replace the failed one.

Regarding claim 37, this claim has similar limitations as claim 1. Therefore, it is rejected under Wils for the same reasons set forth in the rejection of claim 1. The router R1 inherently includes a network interface and a processor for performing the claimed steps.

Regarding claims 38-42, these claims have similar limitations as claims 2-6, respectively. Therefore, they are rejected under Wils for the same reasons set forth in the rejection of claims 2-6, respectively.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 8, 10, 17, 19, 26, 32, 34, 37 have been considered but are moot in view of the new ground(s) of rejection.

Allowable subject matter

4. Claims 7, 16, 25, 44, 43 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claim 36 is allowed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

/DUC C HO/

Primary Examiner, Art Unit 2419

06-06-09

